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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,263	06/19/2002	Patrick Johannes Blom	34434	1713
116	7590	06/29/2004	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			DICUS, TAMRA	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,263

Applicant(s)

BLOM ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14-16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 20040414.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The Examiner acknowledges cancellation of claims 2, 13, and 17 and the IDS.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 (amended), 3– 16, and new claims 17 and 18 are rejected under 35 U.S.C.

103(a) as being unpatentable over USPN 5,851,614 to Buck in view of USPN 5,891,552 to Lu et al.

Buck teaches a self-adhesive opaque dry transfer decal (encompasses transfer label and shaped object) comprising a transparent base sheet (14) of a transparent film (20) with a coating layer (22) (boundary layer of claims 3, 7, and 14) that functions to reduce the strength of UV rays penetrating the transparent film and fading of the underlying ink layers. The printed multiple ink layers 24 (image layer) are deposited on the base sheet (14). The opaque layer (26) comprised of white/metallic ink (pigmented layer) is over the image layer and adhesive layer (3) is over the opaque layer (26). See FIG. 2, column 3, lines 55-68, and col. 4, lines 1-10, and 45-68.

Buck does not include an aluminum powder ranging from 0.1 - 5 wt% (claims 1 and 6). However, Lu teaches a printed plastic film for transfer and teaches adding aluminum pigments to reflect light and aluminum silicates as additives (in about 5 to 70 weight % at col. 4, lines 53-57, which is included in applicant's range of 0.1 – 5wt%) used in an opacifying ink layer at col. 4,

lines 19-60. It would have been obvious to one of ordinary skill in the art to modify the decal of Buck to include aluminum in a pigmented layer within the desired range of applicant to reflect light, and provide a desired degree of translucency or opacity as taught by Lu at col. 4, lines 40-60.

Regarding claim 18, lowering the amounts of aluminum powder to 0 wt % - 1.5 wt%, is an obvious modification. It would have been obvious to one of ordinary skill in the art to modify the decal of Buck since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Additionally, it would have been obvious to one of ordinary skill in the art to decrease the Al wt. %, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. The amount of Aluminum powder effects the opacity degree.

Regarding claims 5, 10-12, and 16, Buck does not teach adding water based ink in a pigmented layer. However, ink is inclusive of "water-based" ink and is used for effecting image transfer. One of ordinary skill in the art would employ water-based ink as conventionally shown in transfers for effective image formation.

Buck does not teach the particle size of the aluminium powder in the opaque pigmented layer. However Lu teaches particle sizes of 1 to 10 microns, meeting the limitations of 5 to 50 microns of claims 4, 8-9, and 15. Hence, it would have been obvious to one of ordinary skill in the art to modify the decal of Buck to include aluminium particles in a size between 5 and 50 microns since Lu teaches suitable particle sizes fall in the range are especially suited for quality transfer media.

Response to Arguments

In response to Applicant's contention that Buck in view of Lu and Sangyo do not teach an "opaque" pigment layer, the Examiner disagrees. Buck teaches this opaque layer, (26), as previously cited. See also col. 4, lines 34-65. Applicant argues Lu treats opacifying agents titanium dioxide, calcium carbonate and aluminum as interchangeable and that the declaration of Blom clarifies that the aforementioned opacifying agents are not interchangeable with aluminum powder. However, upon reviewing the declaration of Blom, this allegation is not shown. For example, there is no comparative data shown of the applicant in comparison to the references to teach the desired aluminum powder is not interchangeable with titanium dioxide, calcium carbonate and aluminum. Nothing within the arguments of Applicant or Declaration of Blom show that when adding aluminum powder instead of the aforementioned opacifying agents the result would be dramatic, surprising, and unexpected, as the Applicant and Declarant contends. Hence the declaration is not convincing. The opacifying agents of the prior art function as masking type agents and therefore exhibit the desired properties Applicant seeks, absent any evidence to the contrary. Until the Applicant can show and prove any results that would not obvious, the rejection will stand.

Applicant alleges Lu teaches away from Applicant's weight percentage from adding 0.1 to 5 wt% aluminum powder, as Applicant states is a criticality. Applicant acknowledges the inclusion of the upper limit of 5 wt% by stating "Lu does not recognize this criticality, since it teaches pretty much the exact opposite weight percent". However, because Lu indeed teaches the upper limit of 5 wt %, applicant's range of 1 to 5 wt % overlaps the prior arts range of 5 to 70

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wt %, and is therefore included. See MPEP 2144.05. Arguments to Sangyo are withdrawn due to Applicant's arguments.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tamra L. Dicus
Examiner
Art Unit 1774

June 23, 2004

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

